

Grade 9

Distance Learning Module 10: Week of: June 8<sup>th</sup> - June 12<sup>th</sup>

Putting it All Together!

## Algebra I, Level 2 - Modified from [Unit F - Beyond Straight Lines](#)

### Targeted Goals from Stage 1: Desired Results

**Content Knowledge:** Equations in the form  $y = ax^2 + bx + c$  can represent real-world situations; the parts of the corresponding graph [vertex, x-intercept(s) and y-intercept] can be described in context

**Vocabulary:**

**Skills:** Determine the most efficient way to solve a quadratic equation, use a quadratic equation to model real world situations (ex. projectile motion)

***Putting it all Together: Deciding which method to use to solve, making connections between graphs, solutions, and equations.***

**Expectation:**

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: Mixed Practice - Use the best method to solve (factoring, taking square roots, completing the square, quadratic formula)	Live Instruction: Determining the best method for solving a quadratic equation	Mixed practice worksheet
Tuesday: Application problems	Live Instruction: Using the quadratic formula to solve real-world application problems. Show Desmos to check.  Link to extra problems (model one with equation given, and another where they need to substitute initial height and velocity in).	Quadratic applications worksheet

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Wednesday: Assessment	Review videos and come to office hours if needed.	Assessment (no link)
Thursday: Putting it all Together.	Live Instruction: Show everything you can do with one given equation in standard form - all possible ways to solve, graph, convert, Desmos, etc.	
Friday: Putting it all Together... (Day 2)	Live Instruction: Show everything you can do with one given equation in vertex form - graph, convert, solve, Desmos, etc.	

**Week criteria for success** (attach student checklists or rubrics):

By the end of this module, students will be able to:

- Determine the *\*best\** way to solve a quadratic equation.
- Use the quadratic formula to solve application problems and provide context for the solution(s).

**Supportive resources and tutorials for the week** (plans for re-teaching): Khan Academy, Kuta Software worksheets, office hours